UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,021	02/23/2004	Naoya Kobayashi	1417-453	3755

23117 7590 03/06/2006

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER	
NGUYEN, CAM N	
ART UNIT	**PAPER NUMBER**
1754	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,021	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Cam N. Nguyen	1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *December 21, 2005 (an election)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) *6 and 7* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *July 15, 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Election/Restriction

1. Applicant's election of Group I, claims 1-5, in the reply filed on December 21, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election *without traverse* (MPEP § 818.03(a)).

2. Claims 6-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made *without traverse* in the reply filed on December 21, 2005.

Claim Objections

3. Claims 2 & 4 are objected to because of the following informalities:

A. In claim 2, line 2, "m2/g" should be changed to --m^2/g--.

B. In claim 4, line 1, "having fine metallic nickel particles of" is suggest changed to --comprising fine metallic nickel particles having--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent (EP 0 624 397 A1), "hereinafter EP '397".

EP '397 discloses a structurally modified alumina useful as a catalyst support, or heat transfer solid, etc. which comprises one or more Group IIA metals, particularly magnesium and barium, composited with particulate alumina. EP '397 further discloses a catalyst composition comprising said particulate alumina solid support composited with a catalytic metal, which is one or more of nickel, iron, platinum or ruthenium, etc. (see abstract & page 9, claims). The catalytic metal is nickel (see page 9, claim 7). The nickel is present in an amount of from about 1 to about 20% (see page 9, claim 8 & also claim 9).

Regarding claims 1 & 2, the difference between the claimed catalyst and that disclosed by the EP '397, is that the EP '397 does not disclose the claimed molar ratio of nickel to the sum of magnesium, nickel and aluminum, a molar ratio of magnesium to aluminum, the average particle diameter of fine metallic nickel particles, and specific surface area of the catalyst.

However, it would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have optimized the concentrations of magnesium, aluminum, and nickel, and controlled the process conditions, such as heating temperatures, etc. in order to achieve an effective catalyst because those are results effective variables in view of *In re Boesch*.

Regarding claim 3-5, product-by-process limitations in the claims are noted. It is considered that while the catalyst of the reference is not made by the same process, the catalyst disclosed is the same as being claimed. Further, it has been held that the patentability of the product and its method of production are separately determined, the process limitations in the product claims as presented have no bearing on the patentability of the product per se. See, *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Brown*, 173 USPQ 688, 688 (CCPA 1977); *In re Fessman*, 180 USPQ 324, 326 (CCPA 1977). See also *MPEP 2113*.

Citations

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form prepared attached. All references are cited for related art.

Conclusion

7. Claims 1-7 are pending. Claims 1-5 are rejected. Claims 6-7 are withdrawn due to nonelected (distinct) inventions. No claims are allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn
February 23, 2006

CAM N. NGUYEN
PRIMARY EXAMINER
Art Unit: 1754